

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

Claims 1-10 (Canceled).

Claim 11 (Currently Amended): A syntactic polyurethane prepared by the process, comprising:

[[of]] reacting

a) a polyisocyanate component with

b) a polyol component,

the polyol component b) comprising the constituents

b1) a polyetherpolyol based on a difunctional initiator molecule,

b2) a polyetherpolyol based on a trifunctional initiator molecule and

b3) a chain extender,

in the presence of

c) hollow microspheres,

the polyol constituent

b2) comprising the constituents

b2-1) a polyetherpolyol based on a trifunctional initiator molecule

having an average molecular weight of from 400 to 3500 g/mol, and

b2-2) a polyetherpolyol based on a trifunctional initiator molecule

having an average molecular weight of from more than 3500 to 8000 g/mol.

Claim 12 (Previously Presented): The syntactic polyurethane according to claim 11, wherein the polyol component b) additionally comprises a constituent

b4) a polyetherpolyol based on an initiator molecule which is tetrafunctional or has a higher functionality.

Claim 13 (Previously Presented): The syntactic polyurethane according to claim 11, wherein the individual constituents of the polyol component b) are selected so that the polyol component b) has a viscosity at 25°C of less than 500 mPa.s, measured according to DIN 53019.

Claim 14 (Previously Presented): The syntactic polyurethane according to claim 11, wherein the component

b1) is present in an amount of from 20 to 60% by weight, the component

b2) is present in an amount of from 20 to 60% by weight, and the component

b3) is present in an amount of from 5 to 25% by weight,

based on the total weight of the polyol component b).

Claim 15 (Currently Amended): A process for the preparation of syntactic polyurethanes, comprising:

[[by]] reacting

a) a polyisocyanate component with

b) a polyol component,

the polyol component b) comprising the constituents

b1) a polyetherpolyol based on a difunctional initiator molecule,

b2) a polyetherpolyol based on a trifunctional initiator molecule and

b3) a chain extender,

in the presence of

c) hollow microspheres,

the polyol constituent b2) comprising the constituents

b2-1) a polyetherpolyol based on a trifunctional initiator molecule
having an average molecular weight of from 400 to 3500 g/mol and

b2-2) a polyetherpolyol based on a trifunctional initiator molecule
having an average molecular weight of from more than 3500 to 8000 g/mol.

Claim 16 (Currently Amended): A method of ~~using for~~ insulating an offshore pipe
pipes, comprising:

applying a reaction mixture comprising the following component a), b) and c) to an
inner pipe of said offshore pipe;

~~a syntactic polyurethane prepared by the process of reacting~~

a) a polyisocyanate component with

b) a polyol component,

the polyol component b) comprising the constituents

b1) a polyetherpolyol based on a difunctional initiator molecule,

b2) a polyetherpolyol based on a trifunctional initiator molecule and

b3) a chain extender,

in the presence of[[.]]

c) hollow microspheres;

to obtain a layer of a syntactic polyurethane.

Claim 17 (Currently Amended): An offshore pipe, comprising ~~composed of~~

(i) an inner pipe and, adhesively applied thereto,

(ii) a layer of a syntactic polyurethane prepared by the process of reacting

- a) a polyisocyanate component with
 - b) a polyol component,
- the polyol component b) comprising the constituents
- b1) a polyetherpolyol based on a difunctional initiator molecule,
 - b2) a polyetherpolyol based on a trifunctional initiator molecule
- and
- b3) a chain extender,
- in the presence of
- c) hollow microspheres.

Claim 18 (Previously Presented): The offshore pipe according to claim 17, wherein the layer (ii) of syntactic polyurethane has a thickness of from 5 to 200 mm.

Claim 19 (Currently Amended): A process for the production of an offshore pipe ~~pipes according to claim 17~~, comprising ~~the steps~~

- 1) providing an inner pipe which is to be coated with syntactic polyurethane,
 - 2) rotating said pipe to be coated, and
 - 3) applying to the rotating pipe an unreacted reaction mixture for the production of the layer of syntactic polyurethane, comprising the components a), b) and c),
- to obtain said offshore pipe according to claim 17.

Claim 20 (New): The syntactic polyurethane according to claim 11, which has a softening point above 150°C.

Claim 21 (New): The syntactic polyurethane according to claim 11, wherein said hollow microspheres are organic hollow microspheres, mineral hollow microspheres or combinations thereof.

Claim 22 (New): The syntactic polyurethane according to claim 21, wherein said organic hollow microspheres are hollow plastics spheres comprising polyethylene, polypropylene, polyurethane, polystyrene or a blend thereof.

Claim 23 (New): The syntactic polyurethane according to claim 11, wherein said mineral hollow microspheres comprise clay, aluminum silicate, glass or a mixture thereof.

Claim 24 (New): The syntactic polyurethane according to claim 11, wherein said hollow microspheres, in an interior, have a vacuum or partial vacuum or are filled with air, an inert gas, or a reactive gas.

Claim 25 (New): The syntactic polyurethane according to claim 11, wherein said hollow microspheres have a diameter of from 1 to 1000 μm .

Claim 26 (New): The syntactic polyurethane according to claim 11, wherein said hollow microspheres have a bulk density of from 0.1 to 0.4 g/cm³.

Claim 27 (New): The syntactic polyurethane according to claim 11, wherein said hollow microspheres have a thermal conductivity of from 0.03 to 0.12 W/mK.

Claim 28 (New): The syntactic polyurethane according to claim 11, wherein said hollow microspheres are hollow glass microspheres.

Claim 29 (New): The syntactic polyurethane according to claim 11, wherein said hollow microspheres are hollow glass microspheres having a hydrostatic compressive strength of at least 20 bar.

Claim 30 (New): The syntactic polyurethane according to claim 11, comprising from 1 to 80 % by weight, based on a total weight of said syntactic polyurethane, of said hollow microspheres.